## ABSTRACT OF THE DISCLOSURE

An apparatus and method for masking interference noise contained in a signal source. According to the present invention, the apparatus comprises: a pseudo random binary sequence generator for generating a digital dither signal; a scrambler for receiving an offset signal and generating a dithered offset signal by scrambling the offset signal with the digital dither signal; a digital-to-analog converter for converting the dithered offset signal into an analog dithered offset signal; a summing device for generating a dithered image signal in response to the analog dithered offset signal and the analog image signal; and an analog-to-digital converter for converting the dithered image signal into the digital image signal.